

## WHAT IS CLAIMED IS:

1. A magnetic recording medium having a 55 nm or less thickness magnetic layer formed on a major surface of an 5 elongated nonmagnetic support by performing a vacuum thin film forming technique, said magnetic recording medium being slid over a magnetoresistive effect magnetic head or a giant magnetoresistive effect head to reproduce a signal,

wherein an angle  $\theta$  which is formed by a growth direction 10 of magnetic particles in a columnar structure in a longitudinal cross-section of said magnetic layer and a normal to a longitudinal direction of said nonmagnetic support, satisfies the following relation:

$$\theta_i - \theta_f \leq 25^\circ.$$

15 where  $\theta_i$  is an angle of  $\theta$  in an initial growth portion of said magnetic layer, and  $\theta_f$  is an angle of  $\theta$  in a final growth portion of said magnetic layer.